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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/791,187	SMITH ET AL.	
	Examiner	Art Unit	
	Benjamin C. Lee	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-85* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-85* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response To Amendment

Final Rejection Status

1. The Finality of Office action mailed 1/4/07 is hereby withdrawn as a result of evidence provided in Applicant's Remarks filed 4/4/07 showing common assignment to the primary reference of O'Toole (US 6,130,602) thereby invalidating it under 35 U.S.C 103(C).

Claim Status

1. Claims 1-85 are pending.

Claim Rejections - 35 USC § 103

2. Claims 1, 4-5, 6-8, 11-12, 14-15, 17, 22, 24, 26-29, 31-35, 37-38, 40-44, 46-60, 62, 64, 73-74, 76-82 and 85 are rejected under 35 U.S.C. 103(a) as being obvious over Marsh et al. (US 5726630 which incorporated by reference on col. 4, lines 40-42 of 07/816,893 (US pat. #5,537,105) by Marsh et al.) in view of Gegan (US 4692769).

1) Claims 1 and 11: Marsh et al. discloses the claimed remote communication device (transponder 38) comprising: communication circuitry configured to at least one of receive communication signals and generate communication signals; and an antenna coupled with the communication circuitry and configured to communicate wireless signals corresponding to the communication signals including at least one of receiving wireless signals and outputting wireless signals (Fig. 2A), the antenna being configured to simultaneously communicate a plurality of (first and second) frequencies via a broadband nature of the antenna (Abstract); except specifying the claimed wherein the antenna being configured to simultaneously substantially tuned to the first and second different substantially resonant frequencies or bands.

While Marsh et al. teaches a known dual band RFID transponder system in which the transponder responds to the dual band frequencies simultaneously using a broadband antenna (Abstract), Gegan teaches a known dual frequency band micro-strip antenna that can communicate dual band tuned resonant frequencies simultaneously (Abstract, Summary, Figures; col. 3, line 4). In view of the teachings by Marsh et al. and Gegan, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to employ a known dual band resonant frequency/band antenna such as taught by Gegan in a system such as taught by Marsh et al. to differentiate the system's communication signals from other systems', e.g. noise associated with the broadband antenna that is responsive to frequencies other than the 2 frequencies/band of interest.

2) Regarding claim 4, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 1, including: the claimed power source coupled with the communication circuitry (C, 34, Supply Voltage in Fig. 4 of Marsh et al.)

3) Claim 12: Marsh et al. and Gegan render obvious the claimed remote communication device according to claim 11, including the claimed wherein the antenna is substantially tuned to the resonant frequencies (col. 3, lines 4-5 of Gegan.)

4) Regarding claim 14, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 11, including: the claimed wherein the antenna is configured to receive the wireless signals, and further comprising another antenna coupled with the communication circuitry and configured to output the wireless signals at a plurality of substantially resonant frequencies (separate transmitter and receiver antennas shown in Fig. 4 of Marsh et al.)

5) Regarding claim 15, O'Toole et al., Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 14, including: the claimed wherein the another antenna is configured to communicate via backscatter modulation (backscatter communication in col. 5, lines 9-19 of Marsh et al.)

6) Regarding claim 5, Marsh et al. andGegan render obvious all of the claimed subject matter as in claim 1, plus the consideration of claim 14.

7) Regarding claim 6, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 5, plus the consideration of claim 15.

8) Regarding claim 7, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 5, wherein it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include a quarter wave transmission line between the antenna and the circuitry as a connection means for improved gain for antenna performance.

9) Regarding claims 22 and 76, Marsh et al. and Gegan render obvious all of the claimed subject matter as in the consideration of claim 14.

10) Regarding claim 24, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 22, plus the consideration of claim 15.

11) Regarding claim 28, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 26, plus the consideration of claim 14.

12) Regarding claim 29, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 28, plus the consideration of claim 15.

13) Regarding claims 40-41, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 38, plus the consideration of claim 5.

14) Regarding claims 46-47, O'Toole et al., Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 44, plus the consideration of claim 14.

15) Claim 17: Marsh et al. and Gegan render obvious the claimed remote communication device according to claim 11, including the claimed RFID circuitry (Fig. 4 of Marsh et al.)

16) Claim 8: Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 1, plus the consideration of claim 17.

17) Regarding claims 26-27, Marsh et al. and Gegan render obvious the claimed subject matter as in the consideration of claims 12 and 17.

18) Regarding claims 31, 34 and 37, Marsh et al. and Gegan render obvious the claimed subject matter as in the consideration of claim 26.

19) Regarding claims 32-33, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 31, plus the consideration of claim 27.

20) Regarding claim 35, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 34, plus the consideration of claim 28.

21) Claim 38: Marsh et al. and Gegan render obvious all of the claimed subject matter as in the consideration of claim 1.

22) Claims 42-43: Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 38, including: the claimed processing wireless signals using the remote communication device and said providing comprises providing an RFID device (Figs. 1-4 of Marsh et al.).

23) Regarding claim 44, Marsh et al. and Gegan render obvious the claimed subject matter as in the consideration of claim 11.

24) Claims 48-49: Marsh et al. and Gegan render obvious the claimed subject matter as in claim 44, including: the claimed processing wireless signals using the remote communication device and said providing comprises providing an RFID device (consideration of claim 17).

25) Regarding claims 50 and 52, Marsh et al. and Gegan render obvious the claimed subject matter as in the consideration of claim 26, plus see Abstract and disclosure corresponding to Figs. 1-4, col. 5, lines 9-19 regarding backscatter, and incorporated US pat. # 5,537,105: col. 3, lines 48-49 which indicated that the RFID device could alternatively use a single or separate antennas, although the claim does not specify that there be ONLY one antenna).

26) Regarding claim 51, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 50, plus the consideration of claim 28 or 14.

27) Regarding claim 53, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 50, plus see Abstract and disclosure corresponding to Fig. 4 of Marsh et al., and incorporated reference US pat. #5,537,105 on col. 3, lines 4-49, in which the receiving and transmitting use the same antenna and carrier frequencies.

28) Regarding claims 54-56, Marsh et al. and Gegan render obvious all of the claimed subject matter as in the consideration of claim 22, including: the claimed wherein the forward link signal from the interrogator is at one of the plurality of frequencies (backscatter communication according to col. 5, lines 9-19 of Marsh et al. requires the interrogator to generate such plural frequency bands for backscatter/reflection by the transponder.)

29) Regarding claim 57, Marsh et al. and Gegan render obvious the claimed subject matter as in the consideration of claim 11.

30) Regarding claim 58, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 57, plus the obviousness consideration of claim 4.

31) Claim 59: Marsh et al. and Gegan render obvious the claimed subject matter as in claim 57, plus the consideration of claim 17.

32) Regarding claim 60, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 57, plus the consideration of claim 5.

33) Regarding claim 62, Marsh et al. and Gegan render obvious all of the claimed subject matter as in the consideration of claim 24, plus the consideration of claims 54-56, wherein:

--the claimed outputting a continuous wave signal... are met by the "backscatter" communication steps involved between the interrogator and the transponder.

34) Regarding claim 64, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 1, plus the consideration of claim 4, and:

It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to implement the resonant type transponder antenna of Marsh et al. and Gegan using a known loop antenna, and furthermore to center the power source/battery with respect to the loop antenna as a matter of structural layout design for improved packaging, since the center of the loop antenna is space available for other components including the power source.

35) Claim 73: Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 1.

36) Regarding 74, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 11, plus the consideration of claim 62 regarding the claimed wherein the

device antenna is configured to communicate at different substantially resonant frequencies corresponding to interrogation signals having different carrier frequencies.

37) Regarding claim 77, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 26 including:

--the claimed wherein the frequencies comprise carrier frequencies of the forward and return signals (backscatter communication considered in claim 11.)

38) Regarding claim 78, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 31, including:

--the claimed wherein the frequencies comprise carrier frequencies of the forward and return signals (backscatter communication considered in claim 11.)

39) Claim 79: Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 38, wherein the frequencies/bands do not overlap (dual band).

40) Regarding claim 80, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 44, including:

--the claimed different carrier frequencies (dual band frequencies considered in claim 11.)

41) Regarding claim 81, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 1, including: the claimed wherein the communication circuitry is configured to control reflection, by the antenna, of electromagnetic energy present at the remote communication device to implement backscatter communications (Figs. 1-4 and backscatter communication of col. 5, lines 9-19 of Marsh et al.)

42) Regarding claim 82, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 4, including: the claimed wherein the power source is a battery (col. 3, line 65

to col. 4, line 10 of incorporated reference US pat. #5,537,105, which teaches that use of battery allows better sensitivity and transmission power), whereby it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include such battery in a system such as taught by Marsh et al. and Gegan in applications where improved signal sensitivity is required or desired.

43) Regarding claim 85, Marsh et al. and Gegan render obvious the claimed subject matter as in claim 31, including: the claimed wherein the interrogator is configured to output a continuous wave signal and the remote communication device is configured t backscatter modulate the continuous wave signal to output the return signals (backscatter communication of Marsh et al.)

3. Claims 2-3, 13, 18-20, 23, 39, 45 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (incorporating US 5537105 Marsh et al. by reference) in view of Gegan and Murakami.

1) Regarding claim 13, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 11, except: the claimed wherein the antenna is configured to electromagnetically communicate with a return loss of less than or equal to approximately -9 dB at the first and second frequencies.

While Marsh et al. and Gegan teaches a transponder conducting backscattering communication using multiple antenna resonant frequencies using a microstrip antenna, Murakami discloses using an antenna (microstrip/patch antenna according to Figs. 1a-1b) having multiple resonant frequencies (f1, f2, f3) with corresponding return losses of about –10dB, -15 dB, -10 dB, respectively (Fig. 6); which meets the claimed limitation.

In view of the teachings of Marsh et al., Gegan and Murakami, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to implement the antenna in Marsh et al. and Gegan to have a low return loss characteristic such as taught by Murakami, since low return loss is generally desired for an antenna in a communication device for optimal signal, range, or power considerations, especially for a low/limited power type transponder such as taught by Marsh et al. and Gegan.

2) Regarding claims 2-3, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 1, plus the consideration of claim 13 in view of Murakami.

3) Regarding claim18, Marsh et al., Gegan and Murakami render obvious all of the claimed subject matter as in the consideration of claims 13 and 17.

4) Regarding claim 19, Marsh et al., Gegan and Murakami render obvious all of the claimed subject matter as in claim 18, plus the consideration of claim 14.

5) Regarding claim 20, Marsh et al., Gegan and Murakami render obvious all of the claimed subject matter as in claim 19, plus the consideration of claim 15.

6) Regarding claim 23, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 22, plus the consideration of claim 13 in view of Murakami.

7) Claim 39: Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 38, plus the consideration of claim 3 (or 13) in view of Murakami.

8) Claim 45: Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 44, plus the consideration of claim 13 in view of Murakami.

9) Regarding claim 75, Marsh et al., Gegan and Murakami render obvious all of the claimed subject matter as in claim 18, including:

--the claimed different carrier frequencies of the communication signals (dual band frequencies involved in backscattering communication.)

4. Claims 9-10, 16, 25, 30, 36, 61 and 83-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (incorporating US 5537105 Marsh et al. by reference) and Gegan as in claim 1, further in view of Kodulkala et al. (US pat. 6,215,402).

1) Regarding claim 9, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 1, except:

--specifying the claimed wherein the frequency bands are centered at approximately 915 MHz. and 2.45 GHz.

However, Kodukala et al. discloses that 915 MHz. and 2.45 GHz. are two of the frequencies conventionally known and used for RFID communication (col. 5, lines 40-67). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to choose the frequency bands in Marsh et al. and Gegan so that they are centered at approximately 915 MHz and 2.45 GHz. since these are frequencies used in known RFID protocols.

2) Regarding claim 16, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 11, except:

--specifying the claimed wherein the antenna includes an impedance reduction conductor.

However, Kodukala et al. teaches the known use of an impedance matching method for (patch) antenna in RFID communication using an impedance matching (including reduction) conductor (Fig. 2A and col. 5, line 40 and col. 6, line 55). It would have been obvious to one of ordinary skill in the art at the time of the claimed invention to include an in impedance reduction

conductor in the antenna as taught by Kodukala et al. in a transponder as taught by Marsh et al. and Gegan to match the impedance for improved performance of the RFID communications.

3) Regarding claim 10, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 1, plus the consideration of claim 16 in view of Kodukala et al.

4) Regarding claim 25, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 22, plus the consideration of claim 16 further in view of Kodulkala et al.

5) Regarding claim 30, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 26, plus the Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 35, plus the consideration of claim 25 (or 16) further in view of Kodulkala et al.

7) Regarding claim 61, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 57, plus the consideration of claim 10 in view of Kodukala et al.

8) Regarding claim 83, Marsh et al. and Gegan and Kodulkala et al. render obvious all of the claimed subject matter as in claim 10, plus the consideration of claim 16, wherein the impedance matching/reduction conductor is connected to the antenna element and thus tunes the frequency bands

9) Regarding claim 84, Marsh et al. and Gegan and Kodulkala et al. render obvious all of the claimed subject matter as in claim 83, wherein it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the concept of impedance matching/reduction via a conductor connected to the antenna element in Marsh et al., Gegan and Kodulkala et al. is applicable to dipole antennas used with RFID tags as well, by coupling the impedance reduction conductor with the dipole antenna including one half of the dipole antenna.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (incorporating US 5537105 Marsh et al. by reference) in view of Gegan, and further in view of Murakami and Kodulkala et al.

1) Regarding claim 21, Marsh et al.,Gegan and Murakami render obvious all of the claimed subject matter as in claim 18, plus the consideration of claim 16 further in view of Kodukala et al.

6. Claims 65, 68-69 and 71-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (incorporating US 5537105 Marsh et al. by reference) in view of Gegan, and further in view of Cook et al. (US pat. 5,320,561).

1) Regarding claim 65, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claims 11 and 4, while:

Cook et al. teaches the known loading/tuning effect of a battery on a nearby antenna and the need for taking such effect into account when regarding antenna parameters (col. 1, lines 52-55; col. 4, line 57 to col. 5, line 14).

In view of their teachings, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to take into account the tuning/loading effect of the battery on the nearby antenna (co-located on a small area of the transponder) when providing the intended frequencies/bands in such design in Marsh et al. and Gegan, since such tuning/loading effect has been known in the art as taught by Cook et al.

2) Regarding claim 68, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 26, plus the consideration of claim 65 in view of Cook et al.

3) Regarding claim 69, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 38, plus the consideration of claim 65 in view of Cook et al.

4) Regarding claim 71, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 54, plus the consideration of claim 65 further in view of Cook et al.

5) Regarding claim 72, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 57, plus the consideration of claim 65 in view of Cook et al.

7. Claim 70 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (incorporating US 5537105 Marsh et al. by reference), Gegan and Kodulkala et al., and further in view of Cook et al.

1) Regarding claim 70, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 44, plus the consideration of claim 1, the consideration of claim 16 in view of Kodulkala et al., and the consideration of claim 65 in view of Cook et al.

8. Claim 66 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (incorporating US 5537105 Marsh et al. by reference), Gegan, and Murakami, and further in view of Cook et al.

1) Regarding claim 66, Marsh et al., Gegan and Murakami render obvious all of the claimed subject matter as in claim 18, plus the consideration of claim 65 further in view of Cook et al.

9. Claims 63 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marsh et al. (incorporating US 5537105 Marsh et al. by reference) and Gegan, and further in view of Moskowitz et al. (US pat. #5,528,222) and Cook et al.

1) Regarding claim 63, Marsh et al. and Gegan render obvious all of the claimed subject matter as in the consideration of claims 1 and 4;

while:

a) Moskowitz et al. teaches the known placement of a battery in the center of the loop antenna for efficient packaging (Fig. 8); and

b) Cook et al. teaches the known loading/tuning effect of a battery on a nearby antenna and the need for taking such effect into account when regarding antenna parameters (col. 1, lines 52-55; col. 4, line 57 to col. 5, line 14).

In view of these teachings, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to center the battery relative to the loop antenna as taught by Moskowitz et al. in a transponder of Marsh et al. and Gegan for improved packaging efficiency, while taking into account the tuning/loading effect of the battery on the antenna when providing the intended frequencies/bands in such design, since such tuning/loading effect has been known in the art as taught by Cook et al.

2) Regarding claim 67, Marsh et al. and Gegan render obvious all of the claimed subject matter as in claim 22, plus the consideration of 63 further in view of Moskowitz et al. and Cook et al.

Response To Arguments

10. Applicant's arguments filed 4/4/07 have been fully considered but they are not persuasive.

1) O'Toole reference, as well as the Final rejection of the previous Office action, have been retracted. The above new grounds of rejection are necessitated by amendment filed 10/2/06.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin C. Lee whose telephone number is (571) 272-2963. The examiner can normally be reached on Mon -Thu 11:00Am-7:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Benjamin C. Lee
Primary Examiner
Art Unit 2612

B.L.